

DESCRIPTIONS OF TWO NEW SMYNTHURIDS.

BY NATHAN BANKS.

We hardly expect to find in the tiny, soft-bodied spring-tails the curious peculiarities that often excite our wonder in the higher groups. The differences between species too often lie in uninteresting details. Sometimes the pattern of markings or the covering of scales attract our attention, but for the most part there is much similarity in appearance. In Florida the writer collected a Smynthurid distinguished from all known species by possessing a distinct median spine on the body; it has been described by Mr. Mac Gillivray as *Smynthurus floridanus*.

Some years ago while collecting on Long Island I found a species of *Smynthurus* with clavate hairs on its back; the specimen was in some way lost, but this year I have rediscovered it. Beside the clavate hairs, which separate it from all other species, this form is also peculiar in having between the eyes two tubercles. The other species which I describe below was swept from weeds on the top of the highest hill on Long Island; it is peculiar in having at the tip of the body horn-like tubercles. This form I have named in honor of that distinguished authority on our Thysanura, Mr. Mac Gillivray.

***Smynthurus clavatus*, sp. nov.**

Length 1.2 mm. Head yellowish, with some irregular reddish spots and a median stripe between antennæ and eyes; antennæ yellowish, darker at the tips; abdomen rich brownish, rather purplish on the sides, anal tubercle yellowish; legs pale, mottled with brownish, furcula paler, but dentes somewhat purplish. (I have seen specimens darker throughout.) Head quite broad, with two conical elevations between the eyes, and a few small tubercles bearing short stiff hairs, simple hairs in front; antennæ very short, first joint no longer than broad, second twice as long, third as long as first and second together, fourth about as long as the third, consisting of two parts, the basal the longer, the apical part tapering, only a few scattered short simple hairs on the antennæ; dorsum of abdomen with scattered large clavate hairs, simple short spike-like bristles on the anal tubercle; legs short, with one claw and a tenant hair at tip (apparently), clothed with stiff short hairs; furcula short, dentes about as long as the diameter of the anal tubercle, curved and with a few simple hairs below (when in place), mucrones one-third the length of the dentes, rather stubby, with minute teeth along the lower edge.

One specimen under loose bark of a decayed log in a swamp, October, Sea Cliff, N. Y.; two others (darker in color) escaped me. Easily distinguished by the short antennæ, tubercles between eyes, and clavate hairs on dorsum.

Smynthurus macgillivrayii, sp. nov.

Length .9 mm. Pale yellowish, whitish below, a black stripe each side starting from the eye and running back to the base of the anal tubercle, on the abdomen it is very much maculose, broader, and connected to the one on the opposite side; legs and furcula pale hyaline. Body clothed with short fine simple scattered hairs, those on the abdomen recurved. Antennae rather long and slender, the first joint no longer than broad, the second twice as long, the third as long as both together, the fourth twice as long as the third, indistinctly subdivided into eight or nine joints, the basal one the longer; legs of moderate length, slender, apparently but one claw and a tenent hair at tip; at the tip of the abdomen near the base of the anal tubercle there is on each side a distinct conical apparently corneous horn or tubercle, seen from above they project somewhat outward; furcula of moderate length, the dentes longer than the diameter of the anal tubercle, with some fine hairs below, the mucrones remarkably short and weak, about one-fourth as long as the dentes and very much smaller in diameter, minutely serrate below.

Several specimens swept from weeds on Harbor Hill, L. I., N. Y., in May. Readily recognized by the pattern, and the tubercles at tip of the abdomen.

NOTE ON MELITTIA SATYRINIFORMIS *Hübner*.

BY WM. BEUTENMULLER.

Melittia satyriniformis HÜBNER, Zuträge Exot. Schmett. 1825, III, p. 176, 453; 454; BOISDUVAL, Suites à Buffon, Nat. Hist. Lepid. 1874, p. 471

Algeria cucurbitæ HARRIS, New England Farmer, Vol. VII, 1828, p. 33; Am. Journ. Arts and Sciences, Vol. XXXVI, 1839, p. 310; Ins. Inj. Veget. 1st Ed. 1841, p. 232; l. c. 2d Ed. 1852, p. 253; l. c. 3d Ed. 1862, p. 331; l. c. 4th Ed. 1863, p. 330; DOUBLEDAY, Harris' Corresp. 1869, p. 161; SCUDDER, Harris' Corresp. pp. 360, 385; RILEY, 2d Rep. Nox. Ins. Mo. 1870, p. 64; REED, Rep. Ent. Soc. Ontario, 1871, pp. 99-90; THOMAS (1st Rep.), 6th Rep. Nox. Ins. Ill. 1878, p. 41; MARTIN, (Thomas' 5th) 10th Rep. Nox. Ins. Ill. 1881, p. 107; SAUNDERS, Ins. Inj. Fruit, 1883, p. 361.

Trochilium ceto WESTWOOD, Cab. Orient. Ent. 1848, pl. 30, fig. 6.

Melittia ceto WALKER, Cat. Lepid. Het. B. M. pt. VIII, 1856, p. 66; MORRIS, Synop. Lepid. N. Am. 1862, p. 335; GROTE, Check List of Moths, 1882, p. 10; HY. EDWARDS, Ent. Amer. Vol. III, 1888, p. 223; BEUTENMULLER, Ann. N. Y. Acad. Sciences, 1890, p. 20; SMITH, Cat. Ins. N. J. 1890, p. 228; Rep. Ent. N. J. 1891, p. 385; l. c. 1893, p. 503; Econom. Ent. 1896, p. 259. KELLCOTT, Can. Ent. Vol. XXIV, 1892, p. 43 and 209; Insect Life, Vol. V, 1892, p. 82.

Melittia cucurbitæ WALKER*, Cat. Lepid. Het. B. M. p. VIII, 1856, p. 66 (as var.? *ceto*); PACKARD, Guide Study of Insects, 1869, p. 279 (and other editions); BOISDUVAL, Suites à Buffon, Nat. Hist. Lepid. 1874, p. 469; COOK, 13th Rep. St. Bd. Agricul. Mich. 1875, p. 116; COLEMAN, Papilio, Vol. II, 1882, p. 50; HULST,

* Walker places *cucurbitæ* as a var.? of *ceto*.